

1

ABSTRACT

5 An axial flow fan has a hub with a plurality of hub
struts extending radially from the hub for mounting a blade on
the end of each hub strut. Inner and outer studs extend in
the axial direction of the fan on each of the hub struts. An
air seal covers the hub struts, and particularly the space
10 between the hub struts. The air seal has a generally round
central sheet and a number of radially adjustable segments
extending radially from the central sheet corresponding to the
number of hub struts. Each of the segments is a generally
trapezoidal sheet spanning the space between adjacent hub
15 struts. Inner and outer slots along each of the radial edges
of the trapezoidal sheet extend in a direction parallel to a
radial line through the center of the sheet with each slot
engaging a stud on a hub strut. This permits the segments to
be adjusted radially to closely match the roots of the blades
20 before nuts are tightened on the threaded studs. As
illustrated, each segment has an outer edge with an axially
extending first wall portion normal to one adjacent hub strut
and a second axially extending wall portion normal to the
25 other adjacent hub strut. Thus, adjacent segments form a
"shroud" parallel to the root of an adjacent blade for an
effective air seal. A step along each radially extending edge
stiffens the segment and connects to a flange having the
30 slots.

30

RDS/mc

SH PAS555424.1-*03/16/04 1:34 PM

35